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— 国際調査報告書

2文字コード及び他の略語については、定期発行される
各PCTガゼットの巻頭に掲載されている「コードと略語
のガイダンスノート」を参照。

(54) Title: ENZYME FOR DECOMPOSITION OF SULFATED FUCAN DERIVED FROM SEA CUCUMBER

(54) 発明の名称: ナマコ由来硫酸化フカン分解酵素

(57) Abstract: Sulfated fucan lyase capable of decomposing sulfated fucan derived from sea cucumber; a process for producing the enzyme; a low molecular compound obtained by causing the enzyme to act on sulfated fucan; a process for producing the same; and an activating factor for sulfated fucan lyase.

(57) 要約: ナマコ由来硫酸化フカンを分解する硫酸化フカン分解酵素、該酵素の製造方法、及び硫酸化フカンに該酵素を作用させて得られる低分子化合物及びその製造方法、ならびに硫酸化フカン分解酵素の活性化因子。

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/07838

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C12N9/44, C12N9/16, C12N19/04, C08B37/00//C12N15/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C12N9/44, C12N9/16, C12N19/04, C08B37/00, C12N15/12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

JSTPlus (JOIS), BIOSIS (DIALOG), WPI (DIALOG)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
<u>X</u> A	Pereira M.S. et al., Structure and anticoagulant activity of sulfated fucans. Comparison between the regular, repetitive, and linear fucans from echinoderms with the more heterogeneous and branched polymers from brown algae, J.Biol.Chem., 1999, Vol.274, No.12, pages 7656-67	<u>7,10</u> 1-6,8-9
<u>X</u> A	WO 01/081560 A1 (Takara Shuzo Co., Ltd.), 01 November, 2001 (01.11.01), Full text & EP 1277834 A1	<u>7,10</u> 1-6,8-9
<u>X</u> A	WO 96/34004 A1 (Takara Shuzo Co., Ltd.), 31 October, 1996 (31.10.96), Full text & EP 870771 A1 & US 6277616 B1 & US 6379947 B2	<u>7,10</u> 1-6,8-9

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	Takeshi SAKAI et al., "Namako Yurai Ryusan-ka α -L-fucan o Bunkai suru Kaiyo Saikin Yurai endo- α -L-fucosidase oyobi sulfatase", Dai 23 kai The Japanese Society of Carbohydrate Research Nenkai Yoshishu, 2002 July, page 136, PII-55	1-10